

# MRE11 (Q459) polyclonal antibody

Catalog: BCP01115 Host: Rabbit Reactivity: Human, Mouse, Rat

#### **BackGround:**

DNA double-strand breaks are generated by ionizing radiation and endogenously produced radicals, and they often are repaired through the RAD52 homologous recombination pathway. The RAD52 family includes RAD51, RAD52, RAD54, RAD54B and MRE11 genes. Rad51 and Rad52 proteins perform the key steps in homologous recombination (HR), including the search for DNA homology and strand exchange, through similar mechanisms. Mre11 functions in both non-homologous end joining, and meiotic HR, and it is essential in mitosis for chromosome maintenance. Rad54 belongs to the SWI2/SNF2 subfamily of ATPases, which includes the DNA helicases involved in replication, recombination, and repair, as it contains seven amino acid sequence motifs that are largely conserved. Rad54 ATPase activity is dependent on double-stranded (ds) DNA, and the ATPase activity of Rad54 is not absolutely required for its DNA repair function, suggesting that these activities occur at distinct regions of the molecule. RAD54B is significantly homologous to the RAD54 recombination gene. Expression of RAD54B is highest in testis and spleen, which are active in both meiotic and mitotic recombination..

## **Product:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

### **Molecular Weight:**

~ 80, 89 kDa

## **Swiss-Prot:**

P49959

### **Purification&Purity:**

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

## **Applications:**

WB: 1:500~1:1000 IHC: 1:50~1:200 IF: 1:50~1:200

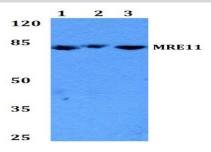
## **Storage&Stability:**

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at  $-20\,\mathrm{C}$  long term. Avoid freeze-thaw cycles.

## **Specificity:**

MRE11 (Q459) polyclonal antibody detects endogenous levels of MRE11 protein.

### **DATA:**



Western blot (WB) analysis of MRE11 (Q459) polyclonal antibody at

1:500 dilution

Lane1:HepG2 whole cell lysate(40ug)

Lane2:HEK293T whole cell lysate(40ug)

Lane3:PC12 whole cell lysate(40ug)

Lane4:AML-12 whole cell lysate(40ug)

## Note:

For research use only, not for use in diagnostic procedure.